

WHAT IS CLAIMED IS:

1. A flow sensor comprising:

a detection section for detecting a flow quantity of a fluid, said detection section having a display section for displaying information based on the detected flow quantity;  
5 and

a main unit section being provided as a separate body from said detection section for displaying the flow quantity detected by said detection section.

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2. The flow sensor as claimed in claim 1 wherein the display section includes:

a plurality of light emission sections; and  
15 a control section for turning on the plurality of light emission sections in order at speed responsive to the detected flow quantity.

3. The flow sensor as claimed in claim 2 wherein said detection section further includes:

20 a Karman vortex detection section for ultrasonically detecting change in a Karman vortex of a fluid; and  
a pulse signal generation section for generating a pulse signal corresponding to the change in the Karman vortex detected by the Karman vortex detection section,

25 wherein the control section turns on the plurality of

light emission sections in order based on the pulse signal generated by the pulse signal generation section.

4. The flow sensor as claimed in claim 1 wherein the display section displays a level responsive to the detected flow quantity.

5. The flow sensor as claimed in claim 1 wherein said detection section comprises:

10 a pipe line through which a fluid passes;  
a vortex generation member being provided in the pipe line for generating a Karman vortex;  
a pair of ultrasonic devices being placed on an outer peripheral surface of the pipe line so as to be opposed to each other with the pipe line between; and  
a press member having a pair of press parts for pressing the pair of ultrasonic devices against the pipe line and a joint part for joining the pair of press parts.

20 6. The flow sensor as claimed in claim 5 wherein said detection section comprises a casing having a width of a first length and a thickness of a second length smaller than the first length, wherein

25 the pair of ultrasonic devices is placed in the casing so as to be arranged in a width direction.

7.. The flow sensor as claimed in claim 6 wherein the case includes a housing space for housing a circuit board for implementing the display section provided so as to be adjacent 5 to one of the ultrasonic devices in the width direction.

8. The flow sensor as claimed in claim 7 wherein the case includes a hermetic seal space for hermetically sealing the pair of ultrasonic devices and a part of the pipe line.

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9. The flow sensor as claimed in claim 8 wherein the housing space and the hermetic seal space are put into one piece.